Subpart K
(EPA Lab Rule)

Laboratory Management Plan
✓ What is Subpart K and when did it become effective?

✓ Who is affected by Subpart K?

✓ Labeling

✓ When must the waste must be picked up?

✓ Containers

✓ P- Listed Materials

✓ Lab Cleanouts
What is Subpart K and when did it become effective?

- **Became effective July 1, 2013**

- **Subpart K provides alternate regulations for managing hazardous waste in academic laboratories**

- **This rule was developed because teaching and research labs differ from industry**
Who is effected by Subpart K?

- Research and teaching laboratories fall under Subpart K
- Non-laboratories must continue to manage their waste per the current guidelines
- Examples of non-laboratories include:
  - Pharmacies and clinics
  - Facilities and other building support functions such as machine shops, housekeeping and vehicle maintenance.
- Off Campus Generators are also excluded!
Labels

UNWANTED MATERIAL

IF FOUND, CONTACT 314-935-5555
Generator info: Washington University
One Brookings Drive, Box 1036
St. Louis, MO 63130

Contents:

PI: ___________ Dept: ___________
Bldg: __________ Room #: __________
Start Date: __________

SUBMIT WITHIN 6 MONTHS!

HAZARDOUS WASTE

FEDERAL LAW PROHIBITS IMPROPER DISPOSAL
IF FOUND, CONTACT 314-935-5555
U.S. Environmental Protection Agency
Generator info: Washington University
One Brookings Drive, Box 1036
St. Louis, MO 63130

Contents:

PI: ___________ Dept: ___________
Bldg: __________ Room #: __________
Start Date: __________

HANDLE WITH CARE!
Labels

• Blue “Unwanted Materials” now replace the yellow “Hazardous Waste” labels
• It is each lab’s responsibility to change to the blue labels.
• No yellow labels allowed in laboratories after July 1, 2013
When must the waste must be picked up?

• Unwanted Materials must be removed within 6 months of the accumulation start date.
  – This is a change from the previous accumulation time allowed of 12 months.
  – This will decrease the amount of time a container will be in a laboratory.

• EH&S will have 10 calendar days to pick up unwanted material after the request for pick up is made. Today we have 3 calendar days.
Containers

• All containers of unwanted materials will be in good condition or over packed into a suitable container before being offered for pick up by EH&S.

• Containers will be compatible with their contents to avoid reactions between the contents and the container.

• Incompatible unwanted materials will be collected, segregated from each other and placed in secondary containment.
Containers

Containers must be kept closed at all times except when:

1. You are adding or removing unwanted material.
2. It is *Working Container*. More information on next slide.
3. Venting of a container is necessary: More information on future slide.
   - For the proper operation of laboratory equipment, such as in-line collection of unwanted materials from high performance chromatographs, or
   - To prevent dangerous situations, such as build-up of extreme pressure.
Working Containers

• *Working Containers* allow the researcher to keep the container open to add waste periodically when conducting an experiment or some type of procedure.

• A *Working Container* must be 2 gallons or less.
  
  • Containers larger than 2 gallons cannot be treated as a *Working Container*. They must be labeled with an “Unwanted Material” label and kept closed except when adding or removing waste.

• *Working Containers* do not need to be labeled.
Working Containers

• *Working Containers* may be open until the end of the procedure or work shift, or until it is full, whichever comes first.
  – At that time, the container must either be closed and labeled as Unwanted Material or
  – the contents transferred to an Unwanted Material labeled container that is then closed.

• If necessary to prevent spills, *Working Containers* will be placed in secondary containment or on absorbent pads while in use.
In-line Systems and Pressure Release

- *In-line systems* to collect unwanted material can allow for pressure release as appropriate for the unit.
  - If the material being collected is an unwanted material the container must be labeled with the blue label.
  - This container must be closed when the unit is not running, the container becomes full or it is the end of the work shift.

- Other waste such as piranha solutions may also be vented as appropriate to prevent pressure build up in waste containers.

- In your blue books document any unwanted materials that require in line systems or pressure release.
Reminders for In-line Systems

• In-line systems collecting material from a unit can either be:
  • Material that the researcher may reuse.
  • Material the researcher has decided that it is unwanted. These containers must be labeled unwanted.

• In your blue books, document whether the material unwanted or not.
P- Listed Materials

• After 7/1/2013 there will be only 6 acutely hazardous waste P- listed limited to < 1 quart
• Acutely hazardous waste (P listed material) must be removed from lab within 6 months or 1 quart limit is reached.
• The 6 are:
  1. P006 – Aluminum Phosphide
  2. P009 – Ammonium Picrate
  3. P065 – Mercury Fulminate
  4. P081 – Nitroglycerin
  5. P112 – Tetranitromethane
  6. P122 – Zinc Phosphide >10%
Laboratory Cleanouts

• Control your inventory- Reduce where possible.

• Subpart K allows a laboratory a once per year Laboratory Cleanout.

• Only allowed one per rolling 12 month period.

• All chemicals to be picked up must be in their original manufacture’s container and have the original label that is legible and complete.

• EH&S has 30 days from the time the list is submitted to remove the chemicals from the laboratory.
Laboratory Cleanouts

• An inventory of the chemicals must be completed.
  – The inventory should be in an electronic format such as a Word or Excel document.
  – The inventory should identify the full chemical name, concentration (if applicable), size of container and volume in that container, as well as the storage location of the items.

• All containers must be labeled with the blue Lab Cleanout label.
  – The label must be placed on the lid of the container.
Laboratory Cleanouts

• Laboratory Cleanout label

UNWANTED MATERIAL
LAB CLEAN OUT
See Label for Contents
Further Information

• Laboratory Cleanout Guidance
• Revised Chemical Waste Unwanted Material Checklist for laboratories
• EHS Waste Disposal Policy
• Chemical Waste Training (Coming soon)